

**Klondyke Tailings Water Quality Assurance Revolving Fund (WQARF) Site
Community Advisory Board Meeting**

**Wednesday, April 25, 2007, 4:00 p.m.
Graham County General Service Bldg.
924 Thatcher Blvd.
Safford, Arizona**

DRAFT MINUTES

Ref: PIOUS #08-015

CAB members present: Lauralea Bott, Michael Bryce, Bill Griffin, Mark Haberstich, Mark Herrington, and Lynn Skinner

CAB Members absent: Noralea Gale and John Luepke

ADEQ Staff in attendance: Scott Goodwin, Project Manager; Mel Taylor, NE Community Liaison; Linda Mariner, Community Involvement Coordinator; and Frank Bell Community Involvement Coordinator

Members of the public present: Melissa Amentt, Bonnie Garwood, Jay and Ginny Schnell, John Stoddard, Diane Saunders, and Catherine Gorman (after meeting was adjourned)

The following matters were discussed, considered, or decided at the meeting:

1. Welcome and Introductions:

Mr. Haberstich conducted the meeting and asked for a motion to start. Mr. Skinner made a motion to call the meeting to order, and Mr. Herrington seconded the motion. Mr. Haberstich asked all the public to introduce themselves.

2. Discussion on Floodplain Analysis Results:

Mr. Goodwin presented the results from the URS study on the floodplain analysis. The data provided by the USGS indicated the August 2006 flood peak flow on Aravaipa Creek was estimated at 29,500 cubic feet per second at the stream gauge near Mammoth. Estimated flow at the tailings would be about 23,000 cubic feet per second. One record in 1983, of about 70,000 cubic feet per second, is in dispute. The last flood was one the largest flood events on record to date. Based on existing data for Aravaipa Creek, from the period of 1919 to 2006, the August 2006 flood qualifies as a one hundred year flood event which means one in a hundred chance of that size of flood for in any given year.

The upper tailings pile is subject to erosion from the twenty-five year flood event, the fifty year flood event, and hundred-year flood event on Aravaipa Creek. The lower tailings pile is not within the twenty-five and fifty-year flood events but a small portion maybe subject to erosion from the hundred year flood events on Aravaipa Creek. Since the first historical records in 1937, the channel of Aravaipa Creek has migrated an average of thirteen feet per year to the east. During the last flood event, the bank of Aravaipa Creek migrated approximately two-hundred forty feet to the east. There are no apparent barriers in the channel to keep it from migrating. The tailing piles are located outside of a bend making it subject to scour and it is more likely the direction of lateral migration of the channel.

Mr. Haberstich asked if ADEQ had looked at whether the level of the creek was aggrading or degrading. Mr. Goodwin said they had not looked at that.

Mr. Goodwin continued by explaining that for the floodplain analysis for Laurel Creek, no gauges are present so flows are estimates based on the size of the drainage and USGS regression equations for Arizona. Estimated hundred year flood peak discharge on Laurel Creek is 3,000 cubic feet per second. The lower pile is subject to erosion from all flood events on Laurel Creek, and there are no significant impacts to the upper pile. Water depth is estimated on both Laurel and Aravaipa Creeks at approximately 0.7 of a foot deep flowing across the property. No area on the property is safe from the flooding.

ADEQ has determined that threats exist to the upper pile from flooding and lateral migration of Aravaipa Creek. ADEQ is moving forward with a plan to protect the upper pile at its current location. URS is performing an updated cost analysis for one of the early response action alternatives that was presented in 2004, providing erosion protection around the entire perimeter of the upper tailings pile. ADEQ is considering moving a small piece of the lower tailings pile back to the upper pile during consolidation. ADEQ is planning on using some temporary protection, such as rip-rap that could be reused, on portions of lower pile to prevent erosion from Aravaipa and Laurel Creeks. ADEQ has no final remedy for the lower pile at this time.

Mr. Griffin asked if ADEQ had considered moving the entire tailings pile away from the creek. Mr. Goodwin replied the cost would be about 10-80 million dollars to move the tailings off the property. Mr. Griffin asked what was contained in the tailings. The answer was leachable lead. Mr. Griffin wanted to know if the lead was at some time valuable on its own. The Lower pile is mostly unprocessed ore so a lot of lead was left behind. Mr. Goodwin explained that there is a big liability issue when accepting removed tailings. Landfills are only permitted to take a certain amount of lead containing waste.

3. Soil Sampling Results:

Mr. Goodwin stated that this year there were over 800 additional samples collected from the adjoining properties in the area. Results are still indicating lead concentration above residential soil remediation standards of 400 mg/kg. Contamination extending up Laurel Creek may indicate contribution to the contamination in the area from the tailings

associated with the Grand Reef mine located on Laurel Creek. ADEQ will collect about 300 additional surface samples. Additional samples will be collected from two properties to the northwest just to make sure they are clean. Additional soil samples will be collected from properties east and northeast of the site up to Mr. Curtis' residence on Laurel Creek.

4. Site Update:

Mr. Goodwin explained that ADEQ is working on a preliminary design and rough cost estimate for the erosion protection of the upper tailings pile. ADEQ is not considering a final remedy for the lower pile at this time. The need to consolidate all the contaminated soils on adjacent properties with the lower pile is the reason that ADEQ is not considering the final remedy for the lower pile yet.

Mr. Haberstich asked if they could tell how much lead from the piles is being dispersed by wind and what is being dispersed by flood waters. Mr. Goodwin said it would be hard to determine.

Mr. Haberstich asked if all the soil samples were taken at the same time. Mr. Goodwin replied that the soil samples taken before the flood were closer to the tailings piles and samples collected after the flood were all on adjacent properties.

Mr. Stoddard stated that he was advised to get a blood test for lead, and his concern now is about who is going to be responsible for his health problems from working in his soil. He asked about how much liability does the State have. Mr. Goodwin could not speak to that because he is not a lawyer, but he reminded him that the State did not put the tailings out there; they are simply trying to provide a remedy. Other concerns Mr. Stoddard had were that he had to take his property taken off the market because of the disclosure requirements, and he felt he should be reimbursed for out-of-pocket expenses he spent to fix the channel of Laurel Creek. Mr. Goodwin commented that the State did not ask the property owners to do the work in the channel of Laurel Creek, and he emphasized that all that work was done without the required federal permit.

5. Acceptance and/or changes to Minutes for April 20, 2006 and September 7, 2007 CAB meetings:

Ms. Bott made a motion to accept the minutes, and Mr. Skinner seconded the motion which was approved unanimously by the board.

6. Vote on New CAB member:

Applicant did not show up; therefore, the CAB members decided to wait until the next meeting to vote her in.

7. Review of Update Draft Community Involvement Plan (CIP):

The CAB discussed the need to put the months that the repository in Klondyke at the Ranger Station Trailer is open in the CIP to clarify that it is not open year round. Mr.

Griffin made the motion and seconded by Mr. Skinner to approve the draft CIP. It passed. It will be signed by the co-chairs at the next meeting.

8. Call to the Public:

The question was asked if there was any way to tell from the soil sampling which samples were pre-flood or after the flood. Mr. Goodwin couldn't tell exactly, but he felt that the numbers at the site really wouldn't change much after the flood. Another questions asked was if there was a proposed date to start the riprap installation. Mr. Goodwin stated that he hoped to be able to begin within a few months after the start of the fiscal year (July 1st) depending on what permits were required and the final design cost.

9. Next Meeting Date and Agenda Discussion:

It was determined by the board to meet Thursday, September 27, 2007 at Klondyke School House starting at 4:00 pm. The board requested a presentation from the U of A on what they are doing at the site as well as the usual site update. Also included in the next meeting will be consideration of the CAB member application and approval of the draft CIP.

10. Adjournment:

Mr. Griffin motioned to adjourn and Ms. Bott seconded the motion. The meeting was adjourned.